



MODEL 12H 678  
12H 679

SPEAKER 49-453 12"  
49-453 12"

NOTE: 23A LOW BASS  
23B TREBLE  
23C VOICE  
23D NORMAL  
23E ALTO  
23F BASS

BAND SWITCH SHOWN  
IN "POLICE" POSITION

⊥ DENOTES CHASSIS GROUND

QWG	PART NO	DESCRIPTION	QWG	PART NO	DESCRIPTION	QWG	PART NO	DESCRIPTION	QWG	PART NO	DESCRIPTION		
C1	22-112	TWO BAND VARIABLE	CE9	22-112	500 MFD	600V	R10	63-840	33M OHM	17W	5	52046	OSCILLATOR COUPLING COIL
C2	22-178	500 MFD	CE10	22-112	500 MFD	600V	R11	63-399	1.5 MEG OHM	17W	6	52046	LOAD COUPLING COIL
C3	22-267	1 MFD	CE11	22-112	500 MFD	600V	R12	63-567	5M OHM	17W	7	52046	DETECTOR COIL ASSEMBLY (P.M.)
C4	22-268	50 MFD	CE12	22-112	500 MFD	600V	R13	63-579	970M OHM	17W	8	52046	COIL P.W.R. ASSEMBLY
C5	22-183	5 MFD ELECTROLYTIC	CE13	22-448	500 MFD	600V	R14	63-160	100 M OHM	17W	9	52026	WAVE TRAP
C6	22-183	5 MFD	CE14	22-943	500 MFD	600V	R15	63-596	330M OHM	17W	10	62-762	12.7" TRANSFORMER (A.M.)
C7	22-146	50 MFD COMP	CE15	22-112	500 MFD	600V	R16	63-578	600 M OHM	17W	11	62-762	12.7" TRANSFORMER (A.M.)
C8	22-112	50 MFD COMP	CE16	22-112	500 MFD	600V	R17	63-172	1000 OHM	17W	12	62-762	12.7" TRANSFORMER (A.M.)
C9	22-112	50 MFD COMP	CE17	22-112	500 MFD	600V	R18	63-174	1000 OHM	17W	13	62-762	12.7" TRANSFORMER (A.M.)
C10	22-112	50 MFD COMP	CE18	22-112	500 MFD	600V	R19	63-174	1000 OHM	17W	14	62-762	12.7" TRANSFORMER (A.M.)
C11	22-162	500 MFD	CE19	22-112	500 MFD	600V	R20	63-226	670M OHM	17W	15	62-762	12.7" TRANSFORMER (A.M.)
C12	22-267	1 MFD	CE20	22-112	500 MFD	600V	R21	63-596	330M OHM	17W	16	52046	INTERNAL P.M. OSC COIL
C13	22-104	50 MFD	CE21	22-112	500 MFD	600V	R22	63-238	100M OHM	17W	17	52046	INTERNAL P.M. OSC COIL
C14	22-267	1 MFD	CE22	22-112	500 MFD	600V	R23	63-498	50M OHM	17W	18	52046	INTERNAL P.M. OSC COIL
C15	22-267	1 MFD	CE23	22-112	500 MFD	600V	R24	63-155	220M OHM	17W	19	52046	INTERNAL P.M. OSC COIL
C16	22-182	1000 MFD	CE24	22-112	500 MFD	600V	R25	63-457	330M OHM	17W	20	52046	INTERNAL P.M. OSC COIL
C17	22-182	1000 MFD	CE25	22-112	500 MFD	600V	R26	63-571	15M OHM	17W	21	52046	INTERNAL P.M. OSC COIL
C18	22-182	1000 MFD	CE26	22-112	500 MFD	600V	R27	63-118	470 OHM	17W	22	52046	INTERNAL P.M. OSC COIL
C19	22-182	1000 MFD	CE27	22-112	500 MFD	600V	R28	63-705	100M OHM	17W	23	52046	INTERNAL P.M. OSC COIL
C20	22-182	1000 MFD	CE28	22-112	500 MFD	600V	R29	63-708	87M OHM	17W	24	52046	INTERNAL P.M. OSC COIL
C21	22-178	5 MFD	CE29	22-112	500 MFD	600V	R30	63-148	100 OHM	17W	25	52046	INTERNAL P.M. OSC COIL
C22	22-178	5 MFD	CE30	22-112	500 MFD	600V	R31	63-148	100 OHM	17W	26	52046	INTERNAL P.M. OSC COIL
C23	22-178	5 MFD	CE31	22-112	500 MFD	600V	R32	63-678	33M OHM	17W	27	52046	INTERNAL P.M. OSC COIL
C24	22-267	1 MFD	CE32	22-112	500 MFD	600V	R33	63-276	60M OHM	17W	28	52046	INTERNAL P.M. OSC COIL
C25	22-267	1 MFD	CE33	22-112	500 MFD	600V	R34	63-276	60M OHM	17W	29	52046	INTERNAL P.M. OSC COIL
C26	22-267	1 MFD	CE34	22-112	500 MFD	600V	R35	63-276	60M OHM	17W	30	52046	INTERNAL P.M. OSC COIL
C27	22-267	1 MFD	CE35	22-112	500 MFD	600V	R36	63-276	60M OHM	17W	31	52046	INTERNAL P.M. OSC COIL
C28	22-267	1 MFD	CE36	22-112	500 MFD	600V	R37	63-276	60M OHM	17W	32	52046	INTERNAL P.M. OSC COIL
C29	22-267	1 MFD	CE37	22-112	500 MFD	600V	R38	63-276	60M OHM	17W	33	52046	INTERNAL P.M. OSC COIL
C30	22-267	1 MFD	CE38	22-112	500 MFD	600V	R39	63-276	60M OHM	17W	34	52046	INTERNAL P.M. OSC COIL
C31	22-267	1 MFD	CE39	22-112	500 MFD	600V	R40	63-276	60M OHM	17W	35	52046	INTERNAL P.M. OSC COIL
C32	22-267	1 MFD	CE40	22-112	500 MFD	600V	R41	63-276	60M OHM	17W	36	52046	INTERNAL P.M. OSC COIL
C33	22-267	1 MFD	CE41	22-112	500 MFD	600V	R42	63-276	60M OHM	17W	37	52046	INTERNAL P.M. OSC COIL
C34	22-267	1 MFD	CE42	22-112	500 MFD	600V	R43	63-276	60M OHM	17W	38	52046	INTERNAL P.M. OSC COIL
C35	22-267	1 MFD	CE43	22-112	500 MFD	600V	R44	63-276	60M OHM	17W	39	52046	INTERNAL P.M. OSC COIL
C36	22-267	1 MFD	CE44	22-112	500 MFD	600V	R45	63-276	60M OHM	17W	40	52046	INTERNAL P.M. OSC COIL
C37	22-267	1 MFD	CE45	22-112	500 MFD	600V	R46	63-276	60M OHM	17W	41	52046	INTERNAL P.M. OSC COIL
C38	22-267	1 MFD	CE46	22-112	500 MFD	600V	R47	63-276	60M OHM	17W	42	52046	INTERNAL P.M. OSC COIL
C39	22-267	1 MFD	CE47	22-112	500 MFD	600V	R48	63-276	60M OHM	17W	43	52046	INTERNAL P.M. OSC COIL
C40	22-267	1 MFD	CE48	22-112	500 MFD	600V	R49	63-276	60M OHM	17W	44	52046	INTERNAL P.M. OSC COIL
C41	22-267	1 MFD	CE49	22-112	500 MFD	600V	R50	63-276	60M OHM	17W	45	52046	INTERNAL P.M. OSC COIL
C42	22-267	1 MFD	CE50	22-112	500 MFD	600V	R51	63-276	60M OHM	17W	46	52046	INTERNAL P.M. OSC COIL
C43	22-267	1 MFD	CE51	22-112	500 MFD	600V	R52	63-276	60M OHM	17W	47	52046	INTERNAL P.M. OSC COIL
C44	22-267	1 MFD	CE52	22-112	500 MFD	600V	R53	63-276	60M OHM	17W	48	52046	INTERNAL P.M. OSC COIL
C45	22-267	1 MFD	CE53	22-112	500 MFD	600V	R54	63-276	60M OHM	17W	49	52046	INTERNAL P.M. OSC COIL
C46	22-267	1 MFD	CE54	22-112	500 MFD	600V	R55	63-276	60M OHM	17W	50	52046	INTERNAL P.M. OSC COIL
C47	22-267	1 MFD	CE55	22-112	500 MFD	600V	R56	63-276	60M OHM	17W	51	52046	INTERNAL P.M. OSC COIL
C48	22-267	1 MFD	CE56	22-112	500 MFD	600V	R57	63-276	60M OHM	17W	52	52046	INTERNAL P.M. OSC COIL
C49	22-267	1 MFD	CE57	22-112	500 MFD	600V	R58	63-276	60M OHM	17W	53	52046	INTERNAL P.M. OSC COIL
C50	22-267	1 MFD	CE58	22-112	500 MFD	600V	R59	63-276	60M OHM	17W	54	52046	INTERNAL P.M. OSC COIL
C51	22-267	1 MFD	CE59	22-112	500 MFD	600V	R60	63-276	60M OHM	17W	55	52046	INTERNAL P.M. OSC COIL
C52	22-267	1 MFD	CE60	22-112	500 MFD	600V	R61	63-276	60M OHM	17W	56	52046	INTERNAL P.M. OSC COIL
C53	22-267	1 MFD	CE61	22-112	500 MFD	600V	R62	63-276	60M OHM	17W	57	52046	INTERNAL P.M. OSC COIL
C54	22-267	1 MFD	CE62	22-112	500 MFD	600V	R63	63-276	60M OHM	17W	58	52046	INTERNAL P.M. OSC COIL
C55	22-267	1 MFD	CE63	22-112	500 MFD	600V	R64	63-276	60M OHM	17W	59	52046	INTERNAL P.M. OSC COIL
C56	22-267	1 MFD	CE64	22-112	500 MFD	600V	R65	63-276	60M OHM	17W	60	52046	INTERNAL P.M. OSC COIL
C57	22-267	1 MFD	CE65	22-112	500 MFD	600V	R66	63-276	60M OHM	17W	61	52046	INTERNAL P.M. OSC COIL
C58	22-267	1 MFD	CE66	22-112	500 MFD	600V	R67	63-276	60M OHM	17W	62	52046	INTERNAL P.M. OSC COIL
C59	22-267	1 MFD	CE67	22-112	500 MFD	600V	R68	63-276	60M OHM	17W	63	52046	INTERNAL P.M. OSC COIL
C60	22-267	1 MFD	CE68	22-112	500 MFD	600V	R69	63-276	60M OHM	17W	64	52046	INTERNAL P.M. OSC COIL
C61	22-267	1 MFD	CE69	22-112	500 MFD	600V	R70	63-276	60M OHM	17W	65	52046	INTERNAL P.M. OSC COIL
C62	22-267	1 MFD	CE70	22-112	500 MFD	600V	R71	63-276	60M OHM	17W	66	52046	INTERNAL P.M. OSC COIL
C63	22-267	1 MFD	CE71	22-112	500 MFD	600V	R72	63-276	60M OHM	17W	67	52046	INTERNAL P.M. OSC COIL
C64	22-267	1 MFD	CE72	22-112	500 MFD	600V	R73	63-276	60M OHM	17W	68	52046	INTERNAL P.M. OSC COIL
C65	22-267	1 MFD	CE73	22-112	500 MFD	600V	R74	63-276	60M OHM	17W	69	52046	INTERNAL P.M. OSC COIL
C66	22-267	1 MFD	CE74	22-112	500 MFD	600V	R75	63-276	60M OHM	17W	70	52046	INTERNAL P.M. OSC COIL
C67	22-267	1 MFD	CE75	22-112	500 MFD	600V	R76	63-276	60M OHM	17W	71	52046	INTERNAL P.M. OSC COIL
C68	22-267	1 MFD	CE76	22-112	500 MFD	600V	R77	63-276	60M OHM	17W	72	52046	INTERNAL P.M. OSC COIL
C69	22-267	1 MFD	CE77	22-112	500 MFD	600V	R78	63-276	60M OHM	17W	73	52046	INTERNAL P.M. OSC COIL
C70	22-267	1 MFD	CE78	22-112	500 MFD	600V	R79	63-276	60M OHM	17W	74	52046	INTERNAL P.M. OSC COIL
C71	22-267	1 MFD	CE79	22-112	500 MFD	600V	R80	63-276	60M OHM	17W	75	52046	INTERNAL P.M. OSC COIL
C72	22-267	1 MFD	CE80	22-112	500 MFD	600V	R81	63-276	60M OHM	17W	76	52046	INTERNAL P.M. OSC COIL
C73	22-267	1 MFD	CE81	22-112	500 MFD	600V	R82	63-276	60M OHM	17W	77	52046	INTERNAL P.M. OSC COIL
C74	22-267	1 MFD	CE82	22-112	500 MFD	600V	R83	63-276	60M OHM	17W	78	52046	INTERNAL P.M. OSC COIL
C75	22-267	1 MFD	CE83	22-112	500 MFD	600V	R84	63-276	60M OHM	17W	79	52046	INTERNAL P.M. OSC COIL
C76	22-267	1 MFD	CE84	22-112	500 MFD	600V	R85	63-276	60M OHM	17W	80	52046	INTERNAL P.M. OSC COIL
C77	22-267	1 MFD	CE85	22-112	500 MFD	600V	R86	63-276	60M OHM	17W	81	52046	INTERNAL P.M. OSC COIL
C78	22-267	1 MFD	CE86	22-112	500 MFD	600V	R87	63-276	60M OHM	17W	82	52046	INTERNAL P.M. OSC COIL
C79	22-267	1 MFD	CE87	2									

## ALIGNMENT PROCEDURE

Operation	Connect Oscillator to	Dummy Antenna	Input Signal Frequency	Band	Set Dial At	Trimmers	Purpose
1	Con. Grid	0.5 mfd.	455 Kc.	BC	600 Kc.	A, B, C, D	Align I.F.
2	R.F. Grid	0.5 mfd.	455 Kc.	BC	600 Kc.	E	Adjust for minimum 455 Kc. signal
3	Ant. Z and G	400 ohm	18 Mc.	BW	18 Mc.	K	Scale SW Osc. at 18 meg.
4	"	"	18 Mc.	SW	16 Mc.	M	Align SW antenna
5	"	"	5 Mc.	Med.	5.0 Mc.	N	Scale med. band osc. at 5. meg.
6	"	"	4.5 Mc.	Med.	4.5 Mc.	Q	Align med. band antenna
7	One turn loop made with generator lead or Radex loop	---	1600 Kc.	BC	1600 Kc.	F	Set BC Osc. to scale at 1600 Kc.
8		---	1400 Kc.	BC	1400 Kc.	G	Align broadcast loop
9		---	600 Kc.	BC	600 Kc.	J	Rock gang to track BC padder
10	7V7 2nd I.F. Grid	0.5 mfd.	8.3 Mc.	Man. F.M.	42.5 Mc.	A <sub>1</sub>	Align for max. deflection across 1/2 discrim. load
11	"	"	"	"	"	B <sub>1</sub>	Align for zero deflection across full discrim. load
12	"	"	"	"	"	A <sub>2</sub> - B <sub>2</sub>	Align for max. deflection across 1/2 discrim. load
13	7V7 1st I.F. Grid	"	"	"	"	A <sub>2</sub> - B <sub>2</sub>	"
14	Converter Grid	"	"	"	"	A <sub>1</sub> - B <sub>1</sub>	"
15	F.M. Ant. Terminal	100 ohm	46 Mc.	"	46 Mc.	Adj. com on gang to scale osc.	Align for zero deflection across full discrim. load
16	"	"	42.5 Mc.	"	42.5 Mc.	P <sub>1</sub>	Align for max. deflection across 1/2 discrim. load
17	"	"	48 Mc.	"	48 Mc.	P <sub>2</sub>	"
18	"	"	46 Mc.	"	46 Mc.	Z	"

## Models 12H678-12H679

Chassis No. 12A6

**Stage Gains**  
Bc. and I.F.

Ant. to R.F. grid  $6.5 \times$  at 1000 Kc.  
R.F. grid to conv. grid  $28.1 \times$  at 1000 Kc.

Conv. grid to I.F. grid  $265 \times$  at 455 Kc.

Overall audio  $807 \times$  at 1 watt, 400 cycles.

